

CLAIMS

1. A scroll compressor comprising:
 - a stationary scroll and a slewing scroll having an end plate
 - 5 and a scroll-like wrap raised from the end plate, respectively;
 - an inhale opening provided at an outer circumference for inhaling fluid;
 - a compression space provided by engaging the respective wraps to each other, the compression space for compressing the fluid
 - 10 inhaled from the inhale opening by reducing capacity thereof while moving from the outer circumference to a center part by a circular orbit motion of the slewing scroll; and
 - a discharge opening provided at the center part for discharging the fluid compressed by the compression space,
 - 15 wherein at least any one of side faces sliding to each other of the respective wraps has a machining mark parallel to corresponding one of the end plates.
2. A scroll compressor comprising:
 - 20 a stationary scroll and a slewing scroll having an end plate and a scroll-like wrap raised from the end plate, respectively;
 - an inhale opening provided at an outer periphery for inhaling fluid;
 - a compression space provided by engaging the respective
 - 25 wraps to each other, the compression space for compressing the fluid inhaled from the inhale opening by reducing capacity thereof while moving from the outer circumference to a center part by a circular

orbit motion of the slewing scroll; and

a discharge opening provided at the center part for discharging the fluid compressed by the compression space,

wherein at least any one of side faces sliding to each other of
5 the respective wraps has a shape perpendicular to corresponding one
of the end plates that is Hale-machined by transferring a shape of
non-rotation.

3. The scroll compressor according to any of claims 1 and 2,
10 wherein at least any of side faces sliding to each other of the
respective wraps is cut by a non-rotational tool.

4. The scroll compressor according to any of claims 1 and 2,
wherein at least any of side faces sliding to each other of the
15 respective wraps has a surface roughness of at most 1 micrometer.

5. A method for machining a scroll wrap comprising:

A) forming a stationary scroll and a slewing scroll that
respectively have an end plate and a scroll-like wrap raised from the
20 end plate for constituting a scroll compressor; and

B) cutting at least any of side faces sliding to each other of the
respective wraps by a non-rotational tool.

6. The method for machining a scroll wrap according to claim 5,
25 wherein the non-rotational tool has a height longer than the height of
a raised part of the respective wrap from corresponding one of the
end plates.

7. The method for machining a scroll wrap according to claim 5, further comprising:

5 C) chucking any of the stationary scroll and the slewing scroll formed by the step A and cutting-machining at least any of side faces sliding to each other of the respective wraps and corresponding one of the end plates by an end mill,

wherein the step B is performed while the chucking status in step C is being maintained.

10

8. The method for machining a scroll wrap according to claim 5, wherein:

the step B allows a non-rotational tool to cutting-machine at least any of side faces sliding to each other of the respective wraps and corresponding one of the end plates, and

15

the method further comprises;

D) performing a finishing by cutting with a non-rotational tool while a same chucking status as that in cutting in the step B is being maintained.

20

9. The method for machining a scroll wrap according to claim 5, wherein at least any of side faces sliding to each other of the respective wraps and corresponding one of the end plates are simultaneously cutting-machined and finished by one non-rotational tool in the step B.

25

10. The method for machining a scroll wrap according to claim 5,

wherein at least any of side faces sliding to each other of the respective wraps and corresponding one of the end plates are separately cutting-machined and finished by different non-rotational tools in the step B.

5

11. The method for machining a scroll wrap according to claim 5, wherein both of an inner face and an outer face of at least any wrap of the stationary scroll and the slewing scroll are cutting-machined and finished a non-rotational tool in any one of an order from the
10 inner face to the outer face and an order from the outer face to the inner face.